

SENSING CIRCUIT FOR SINGLE BIT-LINE SEMICONDUCTOR MEMORY DEVICE

Abstract

A sensing circuit for sensing logic data is shown. A memory cell is electrically connected to a bit line. The sensing circuit contains a first pre-charging module electrically connected to the bit line for pre-charging the bit line. A selecting module is electrically connected between the bit line and a first data line for transmitting signals and for isolating capacitances. A second pre-charging module is electrically connected to the first data line for pre-charging the first data line. A first voltage keeping module is electrically connected to the first data line for maintaining the signal on the first data line at a high voltage level. An isolating module is electrically connected between the first data line and a second data line for transmitting signals and for isolating capacitances. Finally, a third pre-charging module is electrically connected to the second data line for pre-charging the second data line.